

Mean temperatures: Pepeekeo, Hilo district, 100 feet elevation, average maximum, 78.6°; average minimum, 69.3°. Waimae, Hawaii, 2,730 feet elevation, 77.8° and 65.9°. Kohala, 521 feet elevation, 80.9° and 71.5°. Ewa Mill, Oahu, 50 feet elevation, 86.6 and 69.4. Kulaokahua, W. R. Castle's 60 feet elevation, highest, 87°; lowest, 68; average, 77.9°. The prevailing heat of the Northern Hemisphere has not affected these islands.

No earthquake reported. It is unofficially reported that Kilauea shows fire through its floor. Thunder and lightning on Hawaii on the 18th, and on Oahu on the 19th. Snow fell on Mauna Kea on the 18th. Heavy swell on the 3d, 9th to 14th, and 29th.

On June 30 large quantities of fresh black pumicestone were found floating in the bay at Kealakekua.

The high average level of the sea for the months of June and July has attracted some attention. It is doubtless due to meteorological conditions, perhaps in the South Pacific.

Under date of August 19, 1901, Mr. Lyons says:

Perhaps you have the means of knowing whether the barometric pressure in the South Pacific and Australia has been higher than usual during the summer months. The unusual height of mean sea level, as determined by our self-recording tide gage has attracted some attention. There is always as you know a change in sea level either at different seasons of the year, or at certain as yet unknown periods, but it has been about 0.3 foot greater than usual this season.

Rainfall data for the Hawaiian Service.

Stations.	Elevation.	July.	Stations.	Elevation.	July.
	Feet.	Inches.		Feet.	Inches.
HAWAII.			MAUI—Continued.		
Hilo, e. and ne.	50	4.76	Hamos Plantation, se...	60	2.76
Waikaea	100	...	Nahiku, ne...	60	...
Hilo (town)	100	7.19	Nahiku (Lemmon, ne)	990	10.56
Kaumana	1,230	...	Haiku, n...	700	3.52
Pepeekeo	100	4.97	Kula (Erehwon), n...	4,500	1.01
Hakalau	200	4.01	Pu'uomalei, n...	1,400	...
Honohina	800	3.88	Paia, n...	180	1.14
Laupahoehoe	500	...	Haleakala Ranch, n...	2,000	1.94
Ookala	400	1.45	Wailuku	200	...
HAMAKUA, ne.			LANAI.		
Kukaiwa	250	0.70	Keomuku, e...	6	...
Paauilo	750	0.85	OAHAU.		
Paauhau (Gibb)	300	0.44	Punahoa (W. B.), sw...	47	1.58
Paauhau (Greig)	1,150	0.50	Kulaokahua, sw...	50	0.59
Honokaa (Muir)	425	0.57	Kewalo (King street), sw...	15	0.87
Honokaa (Rickard)	1,900	0.30	United States N. S., sw...	6	0.48
Kukuihaele	700	0.65	Kapilani Park, sw...	10	1.10
KOHALA, n.			Manoa (Woodlawn Dairy), c...	285	5.54
Awini Ranch	1,100	...	Makiki Reservoir	150	1.84
Niuifi	200	1.01	School street (B shop), sw...	50	1.95
Kohala (Mission)	521	1.37	Pacific Heights, sw...	700	4.11
Kohala (Sugar Co.)	225	...	Insane Asylum, sw...	30	1.72
Hawi	300	...	Kalihiu-uka	280	8.60
Hawi Mill	600	1.47	Nununu (W. W. Hall), sw...	50	1.43
Waimaea	2,720	0.82	Nununu (Wyllie street), sw...	250	3.09
KONA, w.			Nununu (Elec. Station), sw...	405	4.23
Kallua	950	6.61	Nununu (Luakaha) c...	850	8.75
Kealakekua	1,580	8.07	Waimanalo, ne...	25	1.20
Napoopoo	25	...	Maunawili, ne...	300	4.02
KAU, se.			Kaneohe, ne...	100	...
Honuapo	15	0.26	Ahuimanu, ne...	350	7.24
Kakuku	1,680	2.78	Kahuku, n...	25	2.26
Nasiehu	650	1.08	Waialua, n...	30	...
Hilea	310	8.10	Wahiawa, c...	900	2.00
Pahala	850	1.21	Ewa Plantation, s...	60	0.80
Moaula	1,700	8.17	Waipahu, s...	200	0.68
PUNA, e.			Moanalua, sw...	15	1.18
Volcano House	4,000	2.80	KAUAI.		
Olas			Lihue (Grove Farm), e...	200	5.90
Olas			Lihue (Molokoa), e...	300	6.49
Kepoho	110	...	Lihue (Kukaua), e...	1,000	12.96
Kalapana, se.	8	...	Kealia, e...	15	...
MAUI.			Kilauea, ne...	325	9.91
Olowalu			Hanalei, n...	10	11.90
Leahina			Waiawa, sw...	32	1.83
Waipaoe Ranch, s.	700	0.00	Elele, s...	200	4.72
Kaupo (Mokulau), s.	285	4.85	Waiawa, Mountain, s...	2,100	28.25
Kipahulu, s.	300	5.68	McBrides (Res.)	850	8.51

Records not hitherto published, June, 1901.

Nununu (Wyllie street) ...	8.88		Kahikinui (Maui) ...	0.98
Kula (Erehwon) ...	8.11		Laupahoehoe ...	0.98

NOTE.—The letters n. nw. e. sw. se. ne. and s. attached to each name indicate the exposure or direction toward which localities face; "c," central locality.

RECENT PAPERS BEARING ON METEOROLOGY.

W. F. R. PHILLIPS, in charge of Library, etc.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau:

- American Journal of Science, New Haven, Conn. 4th Series. Vol. 12.*
 Liveing, G. D. and Dewar, James. On the Separation of the Least Volatile Gases of Atmospheric Air and their Spectra. Pp. 207-215.
- Dewar, James. The Nadir of Temperature and allied problems. Pp. 168-172.
- Adams, Edwin P. The Electromagnetic Effects of Moving Charged Spheres. Pp. 155-167.
- Davis, J. Woodbridge. On the Motion of Compressible Fluids. Pp. 107-114.
- Annuaire de la Société Météorologique de France. Tours. 49me année.*
 Besson, Louis. Mesure de la direction et de la vitesse en ballon. Pp. 163-165.
- Besson, Louis. L'ascension internationale du 19 avril, 1901, à Paris. Pp. 161-163.
- Lemoine, G. et Maillet, E. Sur le débit probable des sources pendant la saison chaude de 1901, Pp. 159-161.
- Ritter, Charles. Le nuage et son rôle dans la production de la pluie. Pp. 137-141.
- Annalen der Physik. Leipzig. Vierter folge. Band 5.*
 Angstrom, K. Ueber die Abhängigkeit der Absorption der Gase, besonders der Kohlensäure. Pp. 163-173.
- Kapp, A. W. Studien über das Luftthermometer. Pp. 905-918.
- Lemstrom, Selim. Über das Verhalten der Flüssigkeiten in Capillarröhren unter Einfluss eines elektrischen Luftstromes. Pp. 729-756.
- Annales Agronomiques. Paris. Tome 27.*
 Charabot, —. Influences simultanées séparées de la lumière, de l'altitude, de l'état hygrométrique, de la température, sur la croissance des végétaux. P. 383.
- Annales der Hydrographie und Maritimen Meteorologie. 29 Jahrg.*
 Knipping, E. Sturmtabellen für den Atlantischen Ozean. Beiheft I. P. 19.
- Archives des Sciences Physiques et Naturelles. Genève. Tome 12.*
 Finsterwalder, S. et Muret, E. Les variations périodiques des glaciers. 6me rapport. 1900. Rédigé au nom de la Commission internationale des glaciers. Pp. 118-132.
- Ebert, Hermann. Sur les ions libres de l'air atmosphérique. Pp. 97-118.
- Forel, F. A. Étude thermique des lacs du nord de l'Europe. Pp. 35-55.
- Ciel et Terre. Bruxelles. 22me année.*
 —. Hauteur des nuages. P. 280.
- V. D. L. La pluie de poussière des 10 et 11 mars, 1901. P. 257-262.
- Lancaster, A. La température [1833-1892 à Bruxelles, 1893-1900 à Uccle]. Pp. 249-251.
- Linden, E. Vander. Pluie dans un anticyclone. Pp. 229-233.
- Rahir, E. Photographies du brouillard. Pp. 295-296.
- Comptes Rendus. Paris. Tome 133.*
 Cosserat, Eugene et Francois. Sur la déformation infiniment petite d'une enveloppe sphérique. Pp. 326-329.
- Stanoiewitch, G. M. Méthode électro-sonore pour combattre la grêle. Pp. 373-374.
- Das Wetter. Braunschwig. 18 Jahrg.*
 Assmann, [Richard]. Die Hitze und Dürre des diesjährigen Sommers in Deutschland. Pp. 161-168.
- Electrical World, New York. Vol. 38.*
 Reichel, Walter. [Air Resistance to Rapidly Moving bodies; in article] Zossm Polyphase Railway Experimental Trials with Speeds up to 125 Miles per Hour. Pp. 367-372.
- Gaea. Leipzig. 37 Jahrg.*
 Klein, Hermann. Die Erforschung der Atmosphäre und deren Bedeutung. Pp. 513-527.
- Geographical Journal. London. Vol. 18.*
 Cornish, Vaughan. On Sand-Waves in Tidal Currents. Pp. 170-202.
- National Geographical Magazine. New York. Vol. 12.*
 Page, James. The Drift of Floating Bottles in the Pacific Ocean. Pp. 337-339.

- Nature. London.* Vol. 64.
 MacDowall, Alexander B. The Moon and Wet Days. Pp. 424-425.

La Nature. Paris. 29me Année.
 Espitalier, —. Le [balon] dirigeable de M. Santos-Dumont. P. 182.

Proceedings of the Royal Society. London. Vol. 68.
 Dewar, James. The Nadir of Temperature and Allied Problems. Pp. 360-366.

Physical Review. London. Vol. 13.
 Barnes, H. C. On the Density of Ice. Pp. 55-59.
 Davis, Bergen. On a newly Discovered Phenomenon produced by Stationary Sound Waves. Pp. 31-47.

Symons' Meteorological Magazine. London. Vol. 36.
 —. London Thunderstorm of July 25. Pp. 109-112.
 Dines, W. H. On a Fallacy as to the Diurnal Barometer Wave. Pp. 93-95.

Scientific American Supplement. New York. Vol. 52.
 Henry, A. J. Amplification of Weather Forecasts. P. 2146.

Scientific American. New York. Vol. 85.
 —. Nemethy's Flying Machine. P. 72.
 —. Humidity and Heating Systems. P. 98.

Terrestrial Magnetism and Atmospheric Electricity. Baltimore. Vol. 6.
 Bauer, L. A. Note on the Secular Motion of the Earth's Mean Magnetic Axis. P. 73.
 Neumayer, G. Mean Secular Change of the Magnetic Declination for the Epoch, 1890-1900. P. 62.
 Cady, W. G. Wild's New Method for Determining the Variations of Magnetic Inclination. Pp. 63-64.
 — Notes on Atmospheric Electricity. P. 82-84.
 — Rainfall Traditions. Pp. 112-113.

Memorias y Revista de la Sociedad Científica "Antonio Alzate," Mexico.
Tomo 15.

Moreno y Andra. Contribution à l'étude climatologique de la vallée de Mexico. La variabilité interdiurne moyenne de la température à Tacubaya. Pp. 201-219.

YUKON WEATHER.

By U. G. Myers, Section Director, Eagle, Alaska, dated June 20, 1901.

While temperature is the chief element in any climate, it becomes more dominant as the poles are approached, the other elements becoming more and more subordinated in relative importance.

Though Siberia stands first in producing low temperatures, interior Alaska has always been considered a creditable second. In point of occupation the contrast is more marked. While not so cold and easier of access interior Alaska has never been turned to man's account as has been Siberia, but has remained practically an unknown heritage of the aborigines.

Isolated from the States and further shut off from occupation by vague rumors of frightful winter cold, overpowering summer heat, swarms of hungry mosquitoes, fever fuming bogs, etc., the exploitation of the interior seemed fated to await that motive which inspires men to undertakings otherwise insurmountable. Interior Alaska will date her substantial development from the day Henderson met Carmack at the junction of the Klondike and the Yukon rather than from the discoveries of the man who gave his name to the strait and sea of Bering.

While observations at Eagle, owing to their short duration, do not furnish us a safe guide to the climate, they do serve to bring to view important meteorological features of this section; and at the same time eliminate the personal equation from many "personal recollections." The sign of this annoying human element in its relation to weather features here seems always to have been plus during the summer season not only as regards temperature, but mosquitoes also, and just as readily changed to minus along with the temperature.

The town of Eagle is situated in latitude $64^{\circ} 46'$ north, longitude $141^{\circ} 12'$ east. Its location, in a natural amphitheater, 5 to 7 miles across, is peculiarly favorable to local radiation in winter, and to the observation of clouds formed by ascending currents during the warmer months. The clouds formed over the surrounding mountains tend to con-

verge overhead, and all changes to which they are subjected are readily observed.

Meteorological record at Eagle, Alaska.

